



How do innovation culture, marketing innovation and product innovation affect the market performance of small and medium-sized enterprises (SMEs)?



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1. Introduction

It is known that innovation has a significant impact on the performance of firms [1]. Most studies that focus on the relationship between innovation efficiency and firm size only sought to understand the findings in terms of the improvement of market performance and the exploitation of new market opportunities [2–7]. This specific relationship was further established for small and medium-sized enterprises (SMEs), as well as large companies [8,9]. Because of their number and the significant share of the workforce involved, SMEs play a crucial role in the economies [10]. Thus, strengthening the innovative aspects and knowledge of SMEs brings major opportunities, as innovation is a key to long-term competitiveness and promises further gains regarding private sector performance and economic development [11].

In this light, this paper aims to contribute to the literature by providing a better understanding of the links between the layers of innovation and market performance. Equally, the study empirically tests the resource-based view (RBV) and is extended from Terziovski's work [12]. In contrast to numerous previous studies that indicate market performance as a dimension of the firm's performance, this study provides a clearer view upon the relationship between the constructs of innovation that drive market performance.

The first objective implies highlighting the importance of market innovation and innovation culture on product innovation in

SMEs. Thus, it should be mentioned that innovation is significant at all stages of competition and creates wealth in the business environment for companies [13–15]. Some researchers argue that small firms invest more in product innovation than they do in process innovation [16–18]. Therefore, this study approaches only the effect of product innovation on market performance. Companies need to apply innovation culture in their practices, such as to allow them to succeed in terms of innovative products and services. It is creativity, empowerment, and change of organizational culture that drives innovation [19,20]. Empirical evidence suggests that it is important to build, maintain, and promote a culture of innovation, if companies want to remain successful and create new products [21,22]. However, despite the attention towards the topic of marketing innovation and innovation culture in the literature, previous research did not sufficiently analyze the contribution of innovation culture and the impact of marketing innovation on product innovation.

The second objective of the study is to address the importance of marketing innovation strategies and product innovation when considering superior market performance. The primary idea behind this research is that marketing innovation is a prerequisite when trying to improve market performance. Marketing and product innovation strategies are the key contributors to market performance. Competitiveness has become an indispensable element of survival in the marketplace [23], while innovation activities create superior value and benefits, such as allowing a company to differentiate itself from its' competitors [24]. SMEs can effectively use market innovation to sell differentiated products and services in complex environments [9,25]. The innovation literature suggests that product innovation affects performance [26–29]. In the research, the focus was on the influence innovative activities have on market performance. This study contributes to the present literature by revealing the manner in which the development of a unique innovation culture and marketing innovation provides SMEs with product innovation success. It also sustains that the creation of innovative marketing strategies and product innovation capabilities maintain superior market performance on the part of SMEs.

The researcher theoretically approaches the fact that an RBV

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plays a major role in explaining and answering the following questions in the model. Firstly, to what degree do marketing innovation and product innovation efforts influence the market performance of SMEs? Secondly, how does innovation culture impact on both marketing and product innovation in SMEs? Thirdly, to what degree do marketing and product innovation interact with each other to affect the market performance of SMEs? In this light, the SPSS Amos from listed Turkish SMEs was used to test the hypothesis.

The study begins by discussing the literature and theoretical background of the model, followed by the description of the methodology and the examined samples and measures. The final sections present the results, while highlighting a critical review and possible avenues for future research.

2. Theoretical background and research hypotheses

Innovation is defined as a compulsory component of competitiveness that compasses the new or improved product or process, a new marketing approach, and new organizational behavior in business practices [30–32]. It is assumed that these innovation types improve companies by initiating capability and adopting technological changes. Innovation capability refers to the accumulated ability to improve existing technology and to create new technology, resulting from the various internal and external resources. Applied to products, processes, organizational and marketing innovations, separately or combined, it is considered to expand a firm's overall capability to initiate and keep up with technological change [33].

Based on the relevant literature (summarized in Table 1), the study analyzes the innovation constructs that the research proposes, with Table 2 showing the construct definitions. The empirical model shown in Fig. 1 outlines the hypotheses examined in this study. This study seeks to examine the relationships between marketing innovation, innovation culture, product innovation, and market performance, while focusing on SMEs. As such, the rationale for choosing these factors, in terms of analyzing the innovative activities of SMEs within Turkey, is sustained by the significant number of SMEs from emerging markets, such as, China, Brazil, India, and Russia, which proves that innovation and marketing performance is critically important in driving SME performance [8,34–38].

In order to determine suitable structures required in creating the basis for the improvement of a theoretical model, the study analyzes the literature on innovation in SMEs. It also applies a resource-based view (RBV) to explain how SMEs internal resources impact on performance and encourage competitiveness [39–41]. The RBV is a perspective that investigates the assignment of the qualities of those firms with superior performance. In addition, the RBV can be helpful in acquiring a deeper understanding of such companies' success compared with other businesses [42].

The study adopted the relationship between independent variables and dependent variable SME performances [12], identifying the independent constructs of the strategy as innovation strategy, innovation culture, supplier relationships, and technological relationships, and how these constructs affect SME performance. Following [12] and [42], the present researcher argues that the SMEs' market performance is based on the innovation-related frameworks. This view was further extended to associate the innovative nature of SMEs from an innovative perspective. In this regard, many innovation-related frameworks were used as potential variables for containment in the model by numerous researchers. These include the business model, competitiveness, culture, and technology [43–45]. Equally, marketing and innovation support the success of many firms and were highlighted in many marketing and management journals [46]. Thus, the present study utilizes criteria based on marketing innovation, product innovation, and innovation culture. The conceptual framework is provided by grouping innovation-related variables into three prominent components, while determining how these variables play a significant role in the success of SMEs in terms of market performance.

2.1. SME market performance

Considering their importance, in terms of economic growth, and the major role they play in many economies, the SMEs require more attention and analysis [62]. Nevertheless, it is necessary to mention that the importance of SMEs is also characterized by the fact that throughout the world more than 95% of enterprises are in the form of SMEs [63].

Numerous differences between large firms and SMEs were revealed in the literature, in terms of flexibility, ownership, resource limitations, and decision-making processes [64,65]. As a

Table 1
Research and literature on constructs of innovation that support market performance.

Focus	Study	Main Findings
Innovation culture and product innovation	[47]	Product innovation is stimulated by innovation culture.
	[48]	The innovation culture is the prerequisite for reaching radical product innovation has been approved.
	[49]	The innovation culture can influence product innovation performance and should be considered an essential part of the product innovation process.
	[50]	The findings support the crucial role of an innovation culture in the relationship between leadership and the product innovation process.
	[51]	Innovation culture can improve the performance and enable the improvement of a new product.
Innovation culture and marketing innovation	[52]	Organizational Culture would be positively related to marketing effectiveness.
	[53]	Organizational innovative culture struggles with market superiority and competitive advantage.
Marketing innovation and product innovation	[54]	Marketing innovation capabilities enable the company in a powerful position to satisfy the market and support introducing the new products.
	[55]	Marketing skills have a positive relationship with new product development.
Marketing innovation and market performance	[56]	Marketing innovation has an important role in product related customer and competitor knowledge into market performance.
	[57]	Marketing innovation is one of the key contributors to the SME performance.
Product innovation and market performance	[58,59]	Product innovation and market performance relationship found significantly positive.
	[60]	Product innovation offers superior values to customers, therefore, growth firms' market performance
	[61]	Product innovation has a positive effect on the market performance.

Table 2
The model constructs and their definition.

Construct	Definition	Author
Innovation Culture	Innovative culture indicates that the extent to which a company is suitable to developing innovation or whether it resists innovation.	[61]
Marketing Innovation	Application of a new marketing method compassing important differences in product design and/or packaging, product placement, product promoting or pricing.	[133]
Product Innovation	Product innovation is defined as the development and radical changing to the performance attributes of the supplied product.	[37]
Market Performance	Market performance is defined as being related to market share, sales determiners, revenue premium of the products and services	[69]

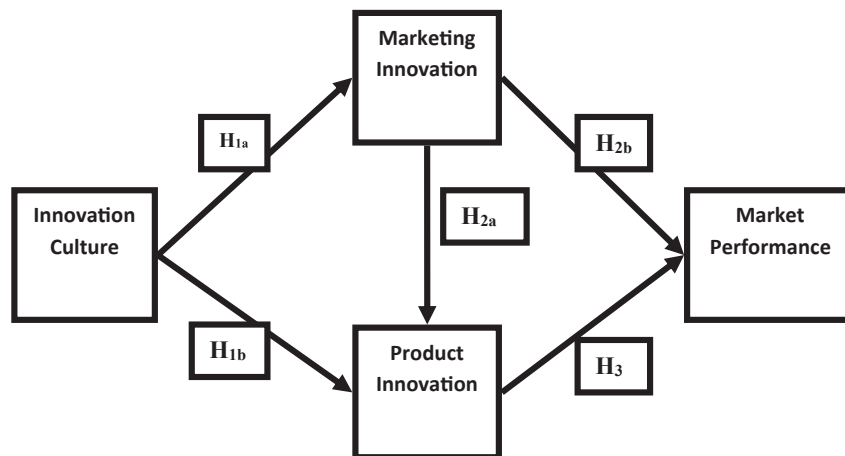


Fig. 1. Research framework.

result of some of these characteristics, SMEs have a high percentage of failure. The lack of leadership and resistance to change and informal planning processes are the primary reasons for SME's failure [66,67]. As such, SMEs are forced to seek various ways in which to improve and maintain a competitive advantage, such as innovation, increased productivity, and marketing. Furthermore, SMEs can apply marketing innovations more effectively when trying to sell innovative products in local or international markets. Firms embrace innovation to gain a competitive advantage that will ultimately lead to superior performance [68]. Nevertheless, marketing innovation has a key role to play in innovating products and enhancing market performance [9]. Therefore, the aim of the present study is to focus on the relationship between market innovation and product innovation, in terms of superior market performance.

Market performance is defined as being related to market share, sales determiners, revenue premium of the products, and services [69]. Previous studies provide evidence that the relationship between innovation and performance is a positive one [70–76]. While these studies highlighted the impact of innovation on SME performance [7,57,77,78], few studies sought to analyze the influence of innovation on SME market performance. Hence, the study examines the relationship between different types of innovation and SME market performance.

2.2. Innovation culture

The findings in the literature indicate a significant relationship between culture and innovation [79–83]. Innovation is a crucial precursor to competition and generates wealth in the business environment [13–15]. However, the application of innovation is not easy to embrace without having a culture that encourages the organization to innovate [84]. Innovation occurs when firms motivate

their employees to share their skills with the rest of the organization [47]. As such, values, beliefs, and behaviors are shared by organizational members in a manner that builds an innovation culture [85,86]. This empowers company development and the obtaining of new knowledge that improves the innovation [87,88].

Previous studies discussed the indispensable role of an innovative culture on the innovative performance of SMEs [84]. A flexible innovative culture in SMEs is determined by low resistance to change and highly entrepreneurial activities [89]. Innovation culture allows SMEs to identify new strategies for creating new channels, while implementing new methods for selling a product that has value for customers [90]. Therefore, SMEs can gain a competitive advantage as a result of the superiority of their innovation culture, when it comes to improving product performance and marketing strategies, and attaining desirable performance. The literature provides a solid link respecting the relationship between innovation culture and marketing [47,91–95]. As such, one can state that SMEs better utilize marketing innovation in an innovative culture environment. A significant relationship between innovative culture and marketing innovation is expected; thus:

H1a. Innovation culture has a positive effect on the marketing innovation performance of SMEs.

Certain researchers highlighted that creating new products involves some difficulty for companies [96]. An innovative culture encourages employees to be creative and risk-taking and to develop new ideas and opportunities that are necessary for the product innovation process [97,98]. In this regard, a great deal of academic interest in the effects of an innovative culture on firm and product performance was shown [48,99–101]. An innovative culture can improve the performance of the firm and enable the development of new products which need creativity, teamwork, open communication, and good employee relationships. Furthermore, SMEs can

employ innovation culture as a strategic tool to improve the performance and facilitate the development of new products [51,102]. Thus, the process of product innovation is profoundly affected by an innovation culture:

H1b. Innovation culture has a positive effect on the product innovation performance of SMEs.

2.3. Marketing innovation

Marketing adds value to the sales interface and to the innovation performance of the company [103]. Market innovation focuses on developing the mix of a target market, while determining how companies can serve the target markets best [37]. It is also described as a progress in marketing mix [53,61]. Nevertheless, innovation and marketing must go hand in hand. Innovation reveals the buyer's needs beyond the product, while marketing innovation has to evaluate customer value perceptions and generate opportunities for unmet customer needs, based on which companies may provide new innovative products [40,104].

Product innovation is significant in the marketing context because it attracts new customers by promising superior value and by enlarging market segments and product lines [91,105]. Many studies support the positive relationship between marketing innovation and product innovation. For example, some indicate that marketing innovation has a positive effect on product innovation [106,107]. Additionally, marketing innovation empowers the offer of cheaper and better quality products [108]. Marketing innovations produce a higher diversification of products [109], which helps companies expand their offerings, while acting as one of the important sources of competitive advantage [110]. As such, firms should use new methods and innovative marketing ideas to promote their products that are not well-known in the market [111].

In the same regard, an important number of studies conceptually claim that marketing innovation generates excellent product innovation and product innovation performance [95]. Thus, SMEs should have the ability to build differences in their products such as to make differentiate them from those of their competitors, and introduce superior customer value by using marketing innovation. Therefore, the hypothesis is:

H2a. Marketing innovation has a positive effect on the product innovation of SMEs.

The marketing capability and innovation performance of companies are strongly related [112]. Innovation is also a significant function of marketing, as it is linked to firm performance. Thus, the remarkable interest on the part of researchers towards the ability of marketing innovation to increase firm performance is reasoned [6,56,57,93,113–116]. Equally, marketing innovation has a positive effect on firm performance [117,118] and an ability to improve, strengthen, and maintain the firm's competitive advantage [56,119].

As mentioned above, the positive relationship between marketing innovation and market performance is supported by a vast literature, starting from the idea that marketing innovation is an integral component of companies' success [56,120]. Also, SMEs' marketing performance places an emphasis on marketing innovation as the key to competitiveness [114].

SMEs adopt marketing within a competitive environment. Considering their size, innovation is the most critical factor that can be used by SMEs to remedy any disadvantages [3]. When SMEs continue developing their current products and services, in order to best meet their customers' needs, and focus on market performance, they run into market-based innovation. As such, SMEs

should introduce marketing innovation strategies to perform better. Thus, one can observe the existence of a positive effect of marketing innovation on SME market performance, leading to following hypothesis:

H2b. Marketing innovation has a positive effect on the market performance of SMEs.

2.4. Product innovation

As innovation can be applied in different forms, the study regards product innovation as one of the significant types of innovation. There are several studies in the literature discussing product innovation [57,110,121–124]. Product innovation is defined as the development and radical change in the performance attributes of the supplied product or service [104]. The concept dominated most discussions on innovation; since it has the strategic importance to satisfy the customer's needs and enter into new markets [16,125]. The innovation literature suggests that product innovation affects company performance [26–29]. Despite SMEs' flexibility and ability to rapidly respond to market needs, the tendency for product innovation is higher in larger firms than is the case in smaller enterprises [127]. Equally, while analyzing the SMEs associated with the development of product innovation and the relationship between product innovation and firms' performance, a study reveals that the product innovation has a positive relationship with a firm's performance [128]. In addition, the positive relationship between new product development and performance is also supported [129].

Product innovations are much better suited to companies entering a market [4], because successful product innovation generates profits, increases market share, and has a positive impact on market performance [104,126,127]. Although the literature indicates that a greater degree of product innovation could increase market performance [130], results failed to support this connection. However, the link between product innovation and performance outcomes is supported [131,132]. Product innovation offers superior value to customers, therefore, leads to a growth in firms' market performance. Accordingly, the hypothesis is:

H3. Product innovation has a positive effect on the market performance of SMEs.

3. Material and methods

3.1. Data collection and sample

The sample consists of managers, owners, marketing and R&D managers of SMEs, all of whom had responsibilities for the implementation of innovative strategies in the firm. Data was gathered through the use of an online survey that was sent by e-mail to all members of the Chamber of Commerce (CoC) and the Chamber of Industry (Col). Individuals in 650 firms filled in the questionnaires, and 326 of them completed the survey in full, with a response rate of 50.1%. All respondents were apprised of the purpose of the study by the agency of the COC and the COI.

There are several important reasons for focusing on small and medium-sized firms. SMEs play a vital role in economic development and income growth worldwide. Furthermore, SMEs enable employment growth, creating the most dynamic environment in emerging economies [63,133,134]. Overall, innovative activities give SMEs the tools to shorten the product life cycles and increase the chances of survival, to compete and grow in a competitive environment [135]. This is especially true for small firms in emerging

Table 3
Sample characteristics.

Position within the company		Years of Incorporation	
Business owner	35.3	<5 years	38.3
Other	30.4	6–10 years	17.8
Board Member	15.0	11–15 years	17.4
General Manager	11.7	16–20 years	8.7
Marketing Man.	6.1	21–25 years	4.3
R&D Managers	1.5	26 years >	13.4
Work Experience		Company Size	
<5 years	27.3	<10 employees	55
6–10 years	22.5	10–24 employees	15.4
11–15 years	25.3	25–49 employees	13.4
16–20 years	9.5	50–99 employees	7.1
21–25 years	7.9	100–250 employees	9.1
26 years >	7.5		

countries that have limited resources and for whom innovation is an expensive activity [136–138].

Table 3 reports the summary statistics of our survey data for the full sample. For the full sample, 35.3% of the sample consisted of the business owner, and 27.3% of the sample had up to 5 years' experience. 55% of the sample companies had started operations in the last ten years. Approximately 80% of the surveyed companies had between 1 and 50 employees and therefore are classified as small companies (in terms of the numbers of employees).

3.2. Scale validity and reliability

Structural Equation Modeling (SEM) is a data analysis technique suitable for hypotheses testing. Table 4 has the loadings, Cronbach alphas, composite reliabilities and average variance extracted (AVE). The minimum loading should be ideally at 0.70 or above, but the admissible value of loading values is 0.5 [139]. Composite reliability and AVE were investigated for all variables included in the model. Composite reliability values exceeding 0.60 are acceptable in terms of the reliability of a measure [140]. All composite reliabilities were above the standard 0.60 (0.83, 0.74, 0.87 and 0.73 respectively). The AVE range achieved the recommended value of 0.50 [83]. The AVE values with regard to innovation culture, product innovation, marketing innovation and market performance achieved the acceptable value of 0.50. Cronbach's alphas for the

four constructs exceeded the cutoff point of 0.70 [141]. Therefore, the measurement model is reliable and valid.

3.3. Measures and measurement model testing

The four constructs of the study are innovation culture, product innovation, marketing innovation, and market performance in SMEs. Most of the variables were adapted from previous studies. Marketing innovation variables were adopted from Sok et al. and Deshpande et al. [53,57]. Innovation culture items were assessed using a 5-item scale based on the work of Terziovski, Gupta et al., and Amabile [12,34,79]. Product innovation was assessed using a 5-scale item derived from Prajogo and Vinarski-Peretz et al. [29,142]. Market performance items were adapted from Hoogan and Coote and, Sok et al. [51,57]. Although most of these measurement items had 5-point scales ranging from 1 = strongly disagree to 5 = strongly agree, the market performance measurement items were captured on a 5 point scale ranging from 1 = poor to 5 = excellent for the last 12 months.

The resulting set of items was analyzed via confirmatory factor analysis using SEM in AMOS 16. Chi-square, root mean square error of approximation, the goodness of fit index (GFI), the comparative fit index (CFI), incremental fit index (IFI), the root mean square error of approximation (RMSEA), the adjusted goodness of fit index (AGFI), the root mean square residual (RMR), all indicated a good fit for the samples. These indices verified the critical values for good model fit for the data (CMIN/DF: 2.136; GFI: 0.90; CFI: 0.96; NFI: 0.93; IFI: 0.96; RMSEA: 0.059; AGFI: 0.90; RMR: 0.34).

Table 5 presents the correlation scores among all constructs. Largely, the descriptive statistics and correlations are in the right directions and as expected. Innovation culture and marketing innovation strategies show a positive and significance correlation with product innovation ($r = 0.595$, $p < 0.01$ and $r = 0.623$, $p < 0.01$). Both innovation culture and marketing innovation show a positive and relatively stronger relationship with market performance ($r = 0.474$, $p < 0.01$ and $r = 0.552$, $p < 0.01$). Product innovation also shows a positive and relatively strong relationship with market performance ($r = 0.560$, $p < 0.01$).

The results with regard to the SMEs shown in Table 6 provide support for the three hypotheses. As H_{1a} predicts, innovation culture has a positive effect on the marketing innovation performance

Table 4
Measurement model.

Item	Standardized Factor Loadings	S.E.	Composite Reliability	Average Variance Extracted (AVE)	Cronbach Alpha
Ic1	0.87	0.75	0.83	0.50	0.93
Ic2	0.90	0.81			
Ic3	0.84	0.71			
Ic4	0.87	0.75			
Ic5	0.76	0.58			
Pi1	0.69	0.77	0.74	0.50	0.88
Pi2	0.81	0.74			
Pi3	0.86	0.65			
Pi4	0.88	0.48			
Mi1	0.82	0.68	0.87	0.50	0.93
Mi2	0.85	0.73			
Mi3	0.80	0.64			
Mi4	0.80	0.64			
Mi5	0.75	0.56			
Mi6	0.84	0.70	0.73	0.50	0.84
Mi7	0.82	0.67			
Mp1	0.71	0.48			
Mp2	0.69	0.57			
Mp3	0.75	0.47			
Mp4	0.69	0.50			
Mp5	0.71	0.51			

CMIN/DF: 2.136; GFI: 0.90; CFI: 0.96; NFI: 0.93; IFI: 0.96; RMSEA: 0.059; AGFI: 0.90; RMR: 0.34.

Table 5
Descriptive statistics and correlations.

Variable	Mean	S.d.	(1)	(2)	(3)	(4)
(1) Innovation culture	3.9956	0.80329	1	0.645**	0.595**	0.474**
(2) Marketing Innovation	4.1120	0.66529	0.645**	1	0.623**	0.552**
(3) Product Innovation	3.8386	0.70194	0.595**	0.623**	1	0.560**
(4) Market Performance	3.2819	0.37509	0.474**	0.552**	0.560**	1

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 6
The structural model.

1	2	3	4	5	6
Exogenous constructs	Endogenous construct	Hypothesis	Estimate		t-ratio
Innovation Culture	Marketing Innovation	H _{1a} (Supported)	0.54	***	11.326
Innovation Culture	Product Innovation	H _{1b} (Supported)	0.20	***	2.927
Marketing Innovation	Product Innovation	H _{2a} (Supported)	0.65	***	7.033
Marketing Innovation	Market Performance	H _{2b} (Supported)	0.21	***	4.068
Product Innovation	Market Performance	H ₃ (Supported)	0.18	***	4.340

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

of SMEs ($H_{1a} = 0.54$; $t = 11.376$; $p < 0.001$). Consistent with H_{1b} , the relationship between innovation culture and the product innovation performance of SMEs is positive and significant ($H_{1b} = 0.20$; $t = 2.927$; $p < 0.001$). These results indicate that Hypotheses H_{1a} and H_{1b} are supported. H_{2a} predicted that marketing innovation performance has a positive effect on the product innovation performance of SMEs. I find strong support for H_{2a} ($H_{2a} = 0.65$; $t = 7.033$; $p < 0.001$). As H_{2b} predicts, the relationship between marketing innovation and market performance is positive and significant ($H_{2b} = 0.21$; $t = 4.068$; $p < 0.001$). Finally, consistent with H_3 , the results indicate a strong positive relationship between product innovation and market performance ($H_3 = 0.18$; $t = 4.340$; $p < 0.001$), thus supporting H_{2b} and H_3 .

4. Discussion of the findings and conclusion

Innovation is a prerequisite for being successful in a competitive environment. In SMEs, innovation culture is an important construct that can sustain product innovation and foster marketing strategies. As such, understanding marketing innovation can help to encourage product innovation and SME market performance. Terziovski's model ensures a framework for considering SME performance and the impact of innovation constructs on it. While building on this model, the present study considers in an empirical context how distinct layers of innovation can support SME market performance. The tests reported here indicate that innovation constructs support SME market performance.

4.1. Theoretical implications

The study extends a model suggested by literature [12,42]. In Terziovski's model, SME performance depends on strategies, capabilities, culture, relationships, and structure. In this paper, SMEs market performance depends on more focused constructs, in the form of innovation culture, market innovation, and product innovation.

Thus, the findings of this study seek to bring several contributions to the literature with regard to organizational practices. It contributes to the overall understanding of market performance by analyzing the innovative structure of SMEs. The theoretical model investigates the relationships among innovation culture, product innovation, marketing innovation, and the market performance of SMEs. The findings show that innovation culture is an effective

source of both marketing innovation and product innovation (H_{1a} and H_{1b}). Furthermore, there are some reasonable statements about these results. Firstly, innovation culture is a prior condition for achieving organizational, marketing, and managerial success in competitive markets. Although previous research revealed the importance of innovation culture in an organization [79,87,143], various questions remain regarding the relationships between innovation culture and the innovative marketing strategies of SMEs.

SMEs' innovation culture not only positively impacts on marketing strategies, but also positively strengthens product innovation performance. When a firm's innovation culture is strong, it has the ability to sustain marketing strategies and foster the generation of new ideas and services to satisfy customers. Also, the creation of an innovation culture may help to develop the process of product innovation and performance.

The study reveals that a marketing innovation strategy has a significant and positive relationship with both product innovation and market performance (H_{2a} and H_{2b}). In the same light, previous studies noted the important role of marketing innovation on market performance [114], business performance [29,56], and SME performance [57]. However, this study extends previous research studies by testing marketing innovation in an integrated model, focusing on SME and market performance. New products are successful when the associated development and marketing activities are well performed [144]. Nevertheless, potential customers know little about a product when it is initially released on the market. Therefore, companies need new tools to introduce and promote it, which will ultimately lead to marketing innovation.

Numerous studies argued that product innovation plays a critical role in the development of new products, process efficiency, and sustained competitive advantage, in terms of extending market share [29,145–148]. The findings show that product innovation has a significant and positive relationship with market performance (H_3). Moreover, unique new products have the effect of enhancing performance [28].

The results of the model highlight that innovation culture and marketing innovation in SMEs have a positive direct relationship with product innovation. The results of the study offer a valuable perspective for researchers, implying that innovation culture stimulates the SMEs to differentiate their organizational culture and products from those of their competitors. As such, the present study contributes to the innovation literature by improving the understanding of the relationship between innovation and the

market performance of SMEs. Mainly, it extends the understanding of the relationships between innovation and market performance by analyzing the impact of marketing innovation and product innovation.

4.2. Managerial implications

The findings of the study point out some implications for managers in terms of the importance of SME marketing innovation strategies and product innovation, with regard to increasing the market share. Firstly, SMEs should improve marketing innovation to achieve a competitive advantage, by building an innovative culture within the company and following the trends. Marketing innovation is crucial for SME managers when it comes to creating new and unique products, and for attaining superior market performance.

Secondly, the findings of the study also propose that SMEs should balance their investment in terms of an innovational learning culture, marketing, and innovation processes, as part of the pursuit of improving market performance. These results help managers to achieve superior market performance. Thirdly, SMEs should improve their product innovation capability, by investing in promotion techniques, and introducing innovative marketing programs within the company. Furthermore, SMEs should be responsive to this type of innovation resulting from their organization environment and marketing related activities, as improving such capability in order to encourage innovation can the develop market performance.

As one can observe, the model described in the study opens the door for a new approach on the part of managers regarding the manner in which SMEs make use of marketing and innovative skills, ensuring successful market performance. Additionally, embedding an innovation culture in the organizational structure can support a higher level of marketing and product innovation. Thus, managers can guide employee behavior, conduct, and integrate their new ideas in such a way as to achieve better market performance outcomes.

5. Limitations and future research directions

This study has several limitations, mostly relating to sample and design. Firstly, it measured SME managers' perceptions of market performance and of product and service innovation performance. Future studies can further develop the results by using objective performance measures. Secondly, the survey was sent to email addresses that the CoC and CoI currently hold in their databases for their members. However, there are no particular reasons to trust that this did influence the decision of the companies to complete the survey. Future research should test the model in different markets, or with different sized companies, in order to see if the results are similar. Future researchers should also investigate some additional drivers, such as organizational innovation and organizational culture, when it comes to exploring the importance of market performance in SMEs.

A solid opportunity for future research concerns the role of managers in building an innovation culture that supports marketing and product innovation. However, the process of establishing innovation dimensions in SMEs is worth investigating. Clearly, managers' behavior will foster various types of innovation in the firm. The role of the managers is to promote clear messages to employees regarding the significant aspects in establishing market-based, client-based focused innovation studies. As such, future research could explore marketing and product innovations that influence and support improved market performance.

Although the model is a strong start, it is not comprehensive. Obviously, more can be learned from the expansion of the model. Prospects for future research are to broaden the focus of marketing

innovation and product innovation on market performance by adding other elements, such as, process innovation and learning abilities, which can benefit both researchers and managers.

Appendix A. Measurement

• Innovation Culture [12,34,79]

1. Our managers have the courage to innovate and take risks.
2. We encourage the creative ideas in our organization.
3. This firm values a willingness to experiment with new ideas.
4. We expect to employees to work together to implement new processes.
5. The most important success factor in our business is to be innovative.

• Marketing Innovation [53,57]

1. We innovate our marketing programs to stay ahead of the market.
2. We try to find new ways to build and improve relationships with customers.
3. The sales techniques are always revised, and the new methods are tried to find.
4. We implement innovative marketing programs.
5. We look for ways to develop new business models.
6. The product design is constantly renewed according to our customer's needs and competitive products.
7. We look for ways to improve our promotion methods and tools.

• Product Innovation [29,142]

1. We frequently introduce new products.
2. We develop new product features.
3. We reposition our existing products.
4. We use new products to penetrate markets

• Market Performance [51,57]

1. Achieving market performance has been
2. Attracting new customers has been
3. Reaching marketing goals has been
4. Sales Management has been
5. Securing desired market share has been

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